

ENVIRON

August 18, 2004

Michael O'Donnell
Remedial Projects Leader
General Electric Advanced Materials
One Plastics Avenue
Pittsfield, MA 01201

RE: Scope and Cost Plan for Follow-up Investigation of PCBs at Sistersville, WV Facility

Dear Mr. O'Donnell:

ENVIRON International Corporation (ENVIRON) is pleased to submit this Scope and Cost Plan to begin follow up investigations of PCBs identified in soil and ground water at the former Crompton / OSi facility (Facility) near Sistersville, West Virginia, now owned by General Electric Advanced Materials (GEAM). The ultimate goal of this investigation is to obtain data that could be used to support a self-implemented clean up of soil impacts under the provisions of 40 CFR 761.61, the PCB Megarule.

Background

In May 2003, ENVIRON completed a due-diligence Phase II subsurface investigation of soil, groundwater, and sediment at the Facility. Samples collected during this investigation identified PCBs in surface soils at eight locations at concentrations exceeding one mg/Kg, and exceeding the PCB Megarule cleanup standard for low occupancy areas of 25 mg/Kg at three locations. Review of historical documentation also determined that four soil samples collected in the area of the Praxair Unit in the central northeast portion of the Facility by previous investigators also contained PCBs, in concentrations ranging from 0.6 to 16 ppm. At nearly all of the eight May 2003 Phase II locations, traces of PCBs were also identified in a deeper (12-15 foot) sample.

PCB concentrations in groundwater from three monitoring wells exceeded the West Virginia ground water standard and federal MCL of 0.5 ug/L. Two of the three wells are located generally downgradient of the areas in which PCBs were identified in soil, and in the same area as where PCB-impacted sediments were identified. To better characterize the nature and extent of the PCBs identified, GEAM, has requested that ENVIRON prepare this scope and cost plan for additional investigation.

Scope of Work

The objective of ENVIRON's investigation is to better characterize the extent of PCBs in soil in the general area of the EP/Waste Incineration/Hazardous Waste Storage Areas, and the Praxair Unit, where PCBs have previously been detected at concentrations exceeding 10 mg/Kg. This investigation will also collect new ground water samples from the three monitoring wells where PCBs were previously identified, to confirm the presence and concentrations of PCBs at those locations.

Prior to beginning field work, ENVIRON will prepare a project-specific health and safety plan, and provide a map of the proposed sampling grids to Facility personnel, with the anticipation that digging (utility) clearance can be provided by the Facility personnel in advance of ENVIRON entering the field.

It is also anticipated that, as with the 2003 Phase II investigation, a background check by an independent contractor will be required for all personnel anticipated to be working inside the Facility.

Soil Investigation

To better characterize the extent and concentrations of PCBs in soil, ENVIRON will lay out sampling grids on 25-foot centers covering the areas within the Waste Incineration and Storage Areas where three Phase II surface soil samples (SB67, 71, and 74) containing PCBs in excess ten mg/Kg were previously identified. Samples will be collected by hand from the 0 - 6-inch depth interval at alternate locations on each grid line (i.e., at 50-foot intervals staggered on each successive line). This amounts to a total of approximately 40 soil samples. Soil samples will be placed in appropriate containers for shipment for laboratory analysis by US EPA Method 8082 for PCBs, and approximately 25% of the samples will also be analyzed for Total Organic Carbon (TOC). The collected samples will be shipped to North East Analytical Laboratories of Schenectady, New York (a West Virginia-certified laboratory) for analysis.

Should PCB concentrations in excess of ten ppm be identified in the samples collected, each such sample will become the center of a new 25-foot grid, which will be sampled in a similar manner in a subsequent round of field work. The intent of this iterative approach is to define the surficial expression of PCB soil contamination greater than ten ppm. Once this effort has been completed, it is anticipated that samples will be obtained from greater depth intervals in areas where surface concentrations exceed ten ppm, to determine the vertical extent of PCB impacts. Ultimately, the intent of this program is to determine the extent of PCBs that may require remediation, using the 25 ppm clean up threshold at 40 CFR 761.61(a)(4)(B).

Ground Water Investigation

During the 2003 Phase II investigation, groundwater samples were collected from 48 monitoring wells at the Facility for analysis of a variety of parameters, including PCBs at some locations. This group of 48 wells consisted of 36 pre-existing wells, and 12 wells installed as part of the Phase II investigation. Because the data from the pre-existing wells was to be used in fulfillment of the Facility's RCRA permits, the 36 wells were purged of three well-volumes of water by a low-flow sampling protocol, which required that the wells be purged at a rate not to exceed one well volume per day. Because the 12 newly-installed wells were not part of the RCRA monitoring program, they were purged and sampled in one day according to conventional protocol. The resultant samples were found to be higher in suspended solids than those from the older, more slowly-purged wells, so the detection of PCBs only in three (3101, 3204, and 5502) of the new wells may in part be a function of higher density of suspended solids.

The follow-up investigation of ground water will therefore utilize a conventional (one-day) low-flow protocol in sampling the three wells, with purging and sampling of the wells to occur at a rate not to exceed 0.5 liters/minute. Turbidity, pH, specific conductance, and temperature will be monitored with a flow-through cell during purging, and sampling will not occur until these parameters have stabilized and vary in consecutive measurements by no more than 10%. Ground water samples will be analyzed in the laboratory by EPA Method 8082. If the PCB concentrations in the new samples (containing presumably lower densities of suspended solids) are found to be comparable to or higher than the 2003 Phase II data, it may be concluded that further investigation of PCBs in Facility ground water is appropriate.

Reporting/Remediation Planning

Once the data are collected, a report will be prepared containing data tables of the analytical results and figures depicting areas that require remediation or further investigation. If no further investigation is required, these data will be used to develop a site-specific remediation plan that will include confirmation sampling and analysis.

Project Schedule

It is anticipated that the field program described above will be completed in approximately one week utilizing a two-person field crew. The field program can commence following GEAM's authorization, and security clearance by a third-party contractor.

Cost Estimate

ENVIRON proposes to undertake this assignment on a time and materials basis in accordance with the attached Terms and Conditions. ENVIRON's cost estimate to complete the investigation is summarized in Table 1. However, contracting, weather, security clearances, and other scheduling and logistical issues that cannot be accounted for in advance could extend the length of the sampling campaign and result in increased costs.

We look forward to working with GEAM to complete this investigation, and appreciate the opportunity to be of continued assistance. If you have any questions or need further information, please contact me at 978/448-8788, extension 25, or Paul Flaherty at 978/448-8788, extension 23.

Sincerely,
(ENVIRON)

James S. Young, PG, LSP
Manager

Table 1. Estimated Costs	
Activity	Estimated Cost
Labor	\$23,700
Subcontracting Costs (laboratory, background checking)	\$ 5,100
Direct Costs (travel, sample and equipment shipment, and disposable equipment)	\$ 8,400
Estimated Total Cost	\$37,200

